United states environmental protection agency
Region 10, 1200 Sixth Avenue
Seattle, Washington 98101

In the matter of:

PRECISION CASTPARTS CORPORATION,
ORD 00902 7970, ORD 00077 3937,
ALPHA LAB

OSPHIANCE ORDER

CHIEF, WASTE MANAGEMENT BRANCH EPA REGION 10

COMPLAINANT

EPA Docket No._

vs.

PRECISION CASTPARTS CORPORATION,

RESPONDENT

Proceeding pursuant to Section 3008(a) of the Resource Conservation and Recovery Act, 42 U.S.C. § 6928(a).

I. JURISDICTION

1. This Compliance Order ("Order") demanding civil penalties and requiring immediate compliance with directives contained in Section III hereinbelow is issued pursuant to authority vested in the Administrator of the United States Environmental Protection Agency ("EPA") under Section 3008(a) of the Solid Waste Disposal Act, also known as the Resource Conservation and Recovery Act of 1976 ("RCRA"), 42 U.S.C. § 6928(a), as amended. This authority has been delegated to EPA Regional Administrators by Delegation Nos. 8-31 and 8-32 dated April 16, 1985; and further delegated to the Director, Hazardous Waste Division, EPA Region 10. COMPLAINT AND COMPLIANCE ORDER - Page 1



- order are violations of RCRA and regulations promulgated thereunder. The State of Oregon Department of Environment Quality ("DEQ") has a federally authorized State hazardous waste program pursuant to Section 3006 of RCRA, 42 U.S.C. § 6926, which administers most RCRA requirements. Notification of this action has been given to DEQ in accordance with Section 3008(a)(2) of RCRA, 42 U.S.C. § 3008(a)(2).
- 4. If Respondent wishes to contest any material fact contained in this Complaint and Compliance Order including the amount of the penalty demand, Respondent may request both a formal and/or informal hearing pursuant to the procedures set forth in the attached NOTICE OF LEGAL PROCEEDINGS; OPPORTUNITY FOR HEARING; OPPORTUNITY FOR SETTLEMENT CONFERENCE. The administrative procedures to adjudicate the allegations and/or directives of this Complaint and Compliance Order, including the imposition of civil penalties, are set out in 40 C.F.R. Part 22 (copy enclosed.)

II. ALLEGATIONS AND CIVIL PENALTY DEMAND

10

14

17 18

19 20

22

21

23

25

26

27

5. Respondent is a corporation organized and existing under the laws of the State of Oregon, doing business in the State of Oregon and a "person" within the meaning of Section 1004(15) of RCRA, 42 U.S.C. § 6903(15) [ALSO CITE STATE STATUTE/REGULATION IF BASE PROGRAM VIOLATIONS ARE ALLEGED IN A DELEGATED STATE].

6. Respondent has owned and operated, and continues to own and operate a "solid waste management facility", within the meaning of Section 1004(29) of RCRA, 42 U.S.C. § 6903(29 [ADD STATE CITE, IF APPROPRIATE], at 4600 S.E. Harney Drive, Portland, Oregon 97206-0898 ("Portland Facility"). Respondent also owns and operates plants at 13340 S.E. 84th Avenue, Clackamas, Oregon 97015 ("Clackamas Facility") and 9125 S.E. 64th Avenue, Portland, Oregon 97206 ("Alpha Lab"). Respondent produces titanium and stainless steel parts at the Portland Facility and stainless steel parts at the Clackamas Facility using an investment casting process. replicas of parts are created and used to make ceramic molds that are filled with molten metal. The ceramic molds are removed from the cooled metal parts using processes that include softening the shell with potassium hydroxide (KOH) or sodium hydroxide (NaOH), generating hazardous wastes that include spent liquid KOH or NaOH and a semi-solid residual consisting of sand contaminated with KOH Both liquid and solid waste streams exhibit the or NaOH. characteristic of corrosivity; the liquid KOH and NaOH wastes also exhibit the characteristic of toxicity due to the concentration of Appendix VIII constituents (chromium, lead, selenium, and/or cadmium). At Respondent's Portland Facility and Alpha Lab,

titanium and titanium alloy parts are dipped in acid to remove an oxidized layer; removing the spent acid baths generates an acid waste containing hydrofluoric (HF) and nitric acid that exhibits the characteristics of corrosivity and toxicity (due to the concentration of chromium). Each of these plants produces over 1000 kg of these wastes per month. Each of these wastes is subject to RCRA, as amended, and the regulations promulgated thereunder.

- 7. Respondent began operations at the Portland and Clackamas Facilities prior to 1980. On August 12, 1980 Respondent submitted a "Notification of Hazardous Waste Activity" (EPA Form 8700-12) to EPA for the Portland and Clackamas Facilities, identifying the handling of ignitable (D001) and corrosive (D002) characteristic hazardous wastes at each Facility. The Portland Facility was assigned EPA identification number ORD 00902 7970; the Clackamas Facility was assigned EPA identification number ORD 00077 3937. Respondent has not submitted a "Notification of Hazardous Waste Activity" (EPA Form 8700-12) for to EPA for the Alpha Lab. Prior to a statement made by a Respondent representative during an inspection of the Portland Facility conducted jointly by EPA and DEQ on April 1 and 18, 1991, EPA was not aware that the Alpha Lab generates hazardous waste.
- 8. Respondent's compliance history includes several past inspections that detected violations of RCRA requirements and one formal RCRA enforcement action by DEQ. Specifically, on March 30, 1988, DEQ issued an assessment of civil penalty citing failure to make hazardous waste determinations and container management

violations (open containers, containers without required labels or accumulation dates) documented in DEQ's November 9, 1987 inspection of the Portland Facility. On September 22, 1988 the Clackamas Facility was inspected by EPA and DEQ; violations observed included failure to document Respondent's claim that its liquid KOH wastes are not a solid waste, failure to implement personnel training requirements, failure to document arrangements made with local authorities, and inadequate frequency of inspections of container storage area. On May 17, 1989, DEQ issued a Notice of Noncompliance to Respondent documenting these violations; however, no formal action was taken.

Information provided by Respondent in January correspondence to EPA indicates that HF and nitric acid are used for chemical milling or cleaning of titanium castings at the Portland Facility, generating about 8000 gal/week of chemical milling wastes, and that NaOH is used during removal of ceramic molds. The solid residual of spent NaOH is radioactive and is therefore sent to the low level radioactive waste disposal site at The spent NaOH liquid is piped to the onsite Hanford, WA. treatment unit that Respondent calls its Elementary Neutralization Unit (ENU). KOH liquids and solids are generated by stainless steel casting operations at both the Portland and Clackamas Facilities, with excess liquid alkaline wastes being shipped off site for use as a neutralizing agent by other industries. KOH solids from both Facilities are transported in drums to the ENU.

26

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

10. During sampling inspections conducted by Bruce Long of EPA and Charles Clinton of DEQ in April 1991, use of acids and bases Respondent's reviewed. in processes was Respondent's representatives stated that spent HF and nitric acid wastes are piped to the neutralization unit and stored in separate tanks. They stated that, at the time of the inspection, NaOH rather than KOH was being used for removal of ceramic molds at the Portland Facilities stainless steel operations. The resulting liquid alkaline wastes are piped to the onsite neutralization facility, where they are stored in tanks prior to neutralization in batches. Semisolid KOH wastes from removal of molds at the stainless steel operations at both the Portland and Clackamas Facilities is transported to the ENU in drums. Respondent's representatives also stated that liquid waste KOH generated at the Clackamas Facility is shipped directly to Tektronix for use in neutralizing spent plating baths (product is F006 waste). Total volume of spent alkaline wastes generated at the Clackamas Facility is about 2000 gallons per month; total volume of KOH wastes generated at the Portland Facility was estimated to be about 6000 gal/mo. Neither facility maintains records of the quantity of wastes generated, shipped offsite, or treated. Information about operations at the Alpha-Lab was also provided by Respondent during the April 1991 site visit. About 2500 gallons of nitric acid wastes per month are generated at the Alpha-Lab by a chemical milling operation; this waste is transported to the ENU in drums, without manifests, since

Respondent views this acid to be a substitute chemical product for neutralizing the alkaline wastes.

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

1

2

11. Data on the influent waste acid and bases include samples of KOH wastes collected at the Clackamas Facility by DEQ on 10/17/90 analyses reported in CH2MHill and the Engineering Study for the Neutralization Facility completed in 1986 or 1987. The early study indicated that the spent KOH solids from both plants were below EPToxic levels, but the spent liquid KOH from the Clackamas Facility exceeded EPToxic levels for chrome, lead, and selenium. No data were provided for the spent KOH liquid from the Portland Facility. Spent NaOH liquid from the titanium operations exceeded EPToxic levels for cadmium and the spent acid wastes from the Portland Facility exceeded EPToxic levels for DEQ data indicated that the spent KOH liquid from the Clackamas Facility exceeded TCLP levels for chromium, and that both the KOH solids and virgin KOH were below TCLP limits; the virgin KOH showed no detectable TCLP metals. No analytical data are available on the presence of hazardous constituents in the Alpha-Lab acid waste stream.

21

22

23

24

25

12. Respondent claims that all of the acid and alkaline waste streams generated at its facilities are exempt from RCRA regulation under the definition of solid waste, 40 CFR 261.2(e), which states, in relevant part:

26

3

4

5 6

7

9

11

12

13

14 15

16

17

18

19 20

21

22

23

2425

26

27

28

COMPLAINT AND COMPLIANCE ORDER - Page 8

(1) Materials are not solid wastes when they can be shown to be recycled by being:

...(ii) used or reused as effective substitutes for commercial products....

Criteria for determining when a material meets this exemption are provided in the preamble to the final rule promulgating the definition of solid waste (50 FR 614-668) (document 1 hereinafter) and in a April 26, 1989 memorandum from Sylvia K. Lowrance, Director, Office of Solid Waste to Hazardous Waste Management Division Directors Regions I-X (document 2 hereinafter). None of the corrosive wastestreams generated by Respondent meet these criteria:

a. Clackamas alkaline liquids - This waste does not meet several of the criteria for use as a substitute commercial product identified in document 2: it contains Appendix VIII constituents [ie chromium, lead, and selenium] not found in the analogous raw material/product (or at higher levels), it does not appear to be handled in a manner consistent with use as a replacement raw material/product in that adequate records regarding the recycling transactions are not kept, and the toxic constituents are not sufficient actually necessary (for use) to the product. Furthermore, Respondent has stated that records of the quantities generated and shipped are not maintained. The transaction with Tektronix does not indicate that Tektronix places a high value on the material, in that they pay only \$1.00 per shipment and bear none of the transport costs -- this does not meet the criterion

(document 1) that "in a two-party transaction there be consideration (usually monetary) for use of the material."

Therefore, this waste stream is a solid waste, and because it exhibits characteristics of corrosivity and toxicity, is also a hazardous waste.

b. Semisolid alkaline wastes (stainless steel operations) -These wastes fail to meet at least two of the criteria for use as an effective substitute for a commercial product identified in document 2: they do not appear to be handled in a manner consistent with use as a replacement raw material/product in that adequate records regarding the quantities generated and shipped from either plant are not maintained, and much more of the substitute material must be used as compared with the analogous raw material it replaces (virgin KOH) because the large quantities of sand present in the solids do not contribute to the desired neutralization. Similarly, owing to the presence of large quantities of sand, which contributes nothing to the neutralization, these alkaline solids are not "commodity-like", a criterion for legitimate recycling identified in document 1. Therefore, these waste streams are solid wastes, and because they exhibit the characteristic of corrosivity, also hazardous wastes.

c. Portland Facility alkaline liquids - This waste fails at least one of the criteria for use as a substitute commercial product identified in document 2: it does not appear to be handled in a manner consistent with use as a replacement raw material/product in that adequate records regarding the quantities

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

generated and shipped are not maintained. No analytical data are available to assess whether it also contains Appendix VIII constituents not found in the analogous raw material/product (or at higher levels); however, since the process generating this waste stream is essentially the same as that generating the analogous waste stream at the Clackamas Facility it is likely that such toxic constituents, which would contribute nothing to the use, are also present. In any case, it is clear that this waste stream is a solid waste, and because it exhibits the characteristic of corrosivity, also a hazardous waste.

- d. Portland Facility Titanium plant NaOH liquids This waste fails to meet several of the criteria for use as a substitute commercial product identified in document 2: it contains Appendix VIII constituents [ie cadmium] not found in the analogous raw material/product (or at higher levels), it does not appear to be handled in a manner consistent with use as a replacement raw material/product in that adequate records regarding the recycling transactions are not kept, and the toxic constituents are not actually necessary (for sufficient use) to the product.
- e. Alpha-Lab acid This waste fails at least one of the criteria for use as a effective substitute commercial product identified in document 2: it does not appear to be handled in a manner consistent with use as a replacement raw material/product in that adequate records regarding the quantities generated and shipped are not maintained. No analytical data are available to assess whether it also contains Appendix VIII constituents not

found in the analogous raw material/product (or at higher levels). In any case, it is clear that this waste stream is a solid waste, and because it exhibits the characteristic of corrosivity, also a hazardous waste.

- 13. The allegations of violations of RCRA requirements hereinbelow, arise from inspections of the Facility conducted by EPA and DEQ on September 22, 1988, April 1, 1991 and April 18, 1991.
- 14. Every statutory or regulatory provision, section or subsection alleged to have been violated in this complaint shall be set forth as a separate count, and a civil penalty shall be demanded for each count. Each such penalty demand shall be based upon facts alleged herein, and upon those factors which must be considered pursuant to Section 3008(a)(3) of RCRA, 42 U.S.C. § 6928(a)(3), and the RCRA Civil Penalty Policy of October 1990, including the seriousness of the violations, any good faith efforts by Respondent to comply with applicable requirements, and any economic benefit accruing to Respondent, as well as such other matters as justice may require.

COUNT I.

15. Statements by Respondent's representatives during the inspection of April 1991 revealed that Respondent generates over 1000 kg a month of corrosive hazardous wastes at its Alpha Lab. Respondent has never submitted Notification of Hazardous Waste Activity or obtained an EPA identification number for the Alpha Lab.

1 | 2 | 0 | 3 | a | 4 | h | 5 | s | 6 | a | i

other things, that any person generating hazardous wastes must file a notification stating the location and general description of his hazardous waste management activity with EPA or an authorized state. OAR 340-102-010 (40 C.F.R. § 262.12) further requires that a generator must have received an EPA identification number before it treats, stores, disposes of, transports, or offers for transportation, hazardous waste.

Section 3010 of RCRA (42 U.S.C. § 6930) requires, among

17. Respondent's failure to submit a Notification of Hazardous Waste Activity or obtain an EPA identification number for the Alpha Lab constitutes a violation of 42 U.S.C. § 6930 and OAR 340-102-010 (40 C.F.R. § 262.12).

18. A civil penalty in the total sum of \$201,500 is demanded for this violation. Failure to notify has a substantial adverse effect on the ability to implement the RCRA program. In addition, proximity of the Alpha Lab to Johnson Creek indicates that improper hazardous waste management by Respondent poses substantial risk of exposure of environmental receptors to hazardous waste. The facility is completely out of compliance with statutory and regulatory requirements for notification. Although the facility is known to have been in operation for over 286 days, a multiday penalty for days 2 to 180 was determined to provide sufficient deterrent effect.

COUNT II

19. A file review reevaluating correspondence between Respondent and DEQ, completed on February 21, 1991 revealed that COMPLAINT AND COMPLIANCE ORDER - Page 12

Respondent receives, stores, and treats at its Portland Facility corrosive hazardous wastes generated by plants on noncontiguous property. The file review also revealed that Respondent has not submitted any RCRA permit applications, notified as a treatment storage facility, or otherwise been granted interim. Corrosive hazardous waste from the Alpha Lab and the Clackamas Facility is shipped to the Portland Facility, where it is stored prior to neutralization.

- 20. OAR 340-105-001.4(b) (40 C.F.R. § 270.1(b)) requires, among other things, that facilities that treat or store offsite hazardous wastes must operate under a RCRA permit or interim status.
- 21. Respondent's acceptance, storage and treatment of wastes generated by plants on noncontiguous property at its Portland Facility ENU constitutes a violation of OAR 340-105-001.4(b) (40 C.F.R. § 270.1(b)).
- 22. A civil penalty in the total sum of \$9,500 is demanded for this violation. Treating and storing offsite wastes without meeting the regulatory requirements has a significant adverse effect on the ability to implement the RCRA program. The potential for harm to human health and the environment in this case is moderated by the limited variety of offsite wastes handled, which are similar to onsite wastes; thus, the added risk is due to the larger quantity of waste handled. The facility is completely out of compliance with statutory and regulatory requirements requiring that facilities acquire either a RCRA permit or interim status

prior to storage or treatment of hazardous waste generated offsite. Although the facility has probably been in violation since the treatment unit was constructed in 1987, it has been determined that in this case a multi-day penalty is not appropriate owing to Respondent's belief that DEQ had approved their waste management system prior to its construction. Insufficient information is available to estimate enconomic benefit.

COUNT III

23. The February 21, 1991 file review revealed that Respondent ships hazardous wastes from the Alpha Lab and the Clackamas Facility to the Portland Facility without preparing a manifest (EPA form 8700-22) or designating a receiving facility that is permitted to handle the waste. This conclusion was confirmed during the April 18, 1991 inspection.

- 24. OAR 340-102-010 (40 C.F.R. § 262.20) requires that generators who transport or offer for transportation hazardous waste for offsite treatment, storage, or disposal must prepare a manifest (EPA form 8700-22) and designate a receiving facility that is permitted to handle the waste.
- 25. Respondent's failure to prepare a manifest (EPA form 8700-22) and designate a receiving facility that is permitted to handle the waste constitutes a violation of OAR 340-102-010 (40 C.F.R. § 262.20).
- 26. A civil penalty in the total sum of \$17,500 is demanded for this violation. Shipment of hazardous waste offsite without

1 ma:
2 im;
3 ke;
4 Th
5 he
6 sh
7 of
8 Co:
9 ig:

manifests creates a substantial adverse affect on the ability to implement the RCRA program particularly when no other records are kept regarding the quantity of wastes shipped or their destination. This action also poses a substantial possibility for harm to human health or the environment in the event of an accident during shipment. Although the bulk of hazardous wastes generated at each of the facilities are the acids and bases described in this Complaint, both the Portland and Clackamas Facilities also generate ignitable wastes that appear to be shipped under manifest in accordance with regulation.

COUNT IV

- 27. The inspections of September 22, 1988 and April 18, 1991 revealed that Respondent stores hazardous waste at the Portland Facility, the Alpha Lab, and the Clackamas Facility in containers and tanks that are not clearly marked with the words "hazardous waste" or with the date when accumulation began.
- 28. OAR 340-102-010 (40 C.F.R. § 262.34) requires, among other things, that generators may accumulate hazardous waste onsite for 90 days or less without a permit or interim status provided that the wastes are stored in containers and tanks that are clearly marked with the words "hazardous waste" and with the date when accumulation began.
- 29. Respondent's failure to clearly mark containers and tanks with the words "hazardous waste" and with the date when

accumulation began constitutes a violation of OAR 340-102-010 (40 C.F.R. § 262.34).

30. A civil penalty in the total sum of \$9,500 is demanded for this violation. Storage of unlabeled, undated containers and tanks creates a significant adverse affect on the ability to implement the RCRA program. This action also poses a significant possibility for harm to human health or the environment in the event of an accident that causes a release and a significant potential that wastes could be shipped offsite to unregulated disposal facilities. Although the bulk of hazardous wastes generated at each of the facilities are the acids and bases described in this Complaint, both the Portland and Clackamas Facilities also generate ignitable wastes that appear to be labeled and dated in accordance with regulation.

The total penalty demand for the RCRA violations alleged

18 hereinabove is \$238,000.00, as follows:

Count 1..... \$201,500

Count 2..... 9,500

Count 3..... 17,500

Count 4..... 9,500

24 TOTAL \$238,000

III. COMPLIANCE ORDER

COMPLAINT AND COMPLIANCE ORDER - Page 16

4 5

COMPLAINT AND COMPLIANCE ORDER - Page 17

A. All work to be performed pursuant to this Order shall be under the direction and supervision of qualified personnel. Respondent shall provide a copy of this Order to all contractors, subcontractors, laboratories, and consultants retained to conduct or monitor any portion of the work performed pursuant to this Order. Respondent shall provide a copy of this Order to any successor(s) in interest prior to any transfer of ownership or

undertake the following activities:

operation of the Facility.

32. Upon receipt of this Order, Respondent shall immediately

B. Within fifteen (15) days after receipt of this Order, Respondent shall submit a Notification of Hazardous Waste Activity to obtain an EPA identification number for the Alpha Lab in accordance with 42 U.S.C. § 6930 and OAR 340-102-010 (40 C.F.R. § 262.12).

C. Within fifteen (15) days after receipt of this Order, Respondent shall clearly mark with the words "hazardous waste" and with the date when accumulation began all hazardous wastes stored onsite in containers and tanks at any of its facilities.

D. Immediately upon receipt of this Order, Respondent shall, whenever it transports or offers for transportation hazardous waste for offsite treatment, storage, or disposal, prepare a manifest (EPA form 8700-22) and designate a receiving facility that is permitted to handle the waste in accordance with OAR 340-102-010 (40 C.F.R. § 262.20).

- E. Immediately upon receipt of this Complaint and Compliance Order, Respondent shall cease accepting for storage and treatment at its Portland Facility any hazardous wastes generated offsite.
- F. Within thirty (30) days after receipt of this Order, Respondent shall submit for each of the subject Facilities a revised Waste Analysis Plan (WAP) that includes analysis of all of representative samples of its corrosive hazardous waste streams and of the sludge generated by onsite neutralization of these wastes for Toxicity Characteristic metals; such analysis shall be conducted annually or whenever Respondent changes its process, whichever is more frequent. Within sixty (60) days after EPA approval of the WAP Respondent shall submit results of the first analyses under the Plan. For any wastestreams that Respondent claims to be exempt from definition as Solid Waste under 40 C.F.R. § 261.2(e), Respondent shall, within sixty (60) days after EPA approval of the WAP, submit documentation showing that it meets the relevant criteria for exclusion from definition as a solid waste; prior to receipt EPA concurrence with Respondent's determination, Respondent shall handle the waste as a solid waste (and as a hazardous waste if it exhibits a characteristic or is listed under 40 C.F.R. § 261 Subpart D.)
- 33. Attached to this Complaint and Compliance Order is a Certificate of Completion, which must be executed by Respondent and returned to EPA at the address set forth in paragraph 35 below, within fourteen (14) days after full compliance with all of the

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

provisions of Section III of this Complaint and Compliance Order. No alternate, substitute, or additional proof of compliance will be accepted or reviewed by EPA.

- 34. In accordance with Section 3008(c) of RCRA, 42 U.S.C. § 6928(c), as amended, violation of any portion of this Compliance Order shall subject Respondent to a civil penalty of up to \$25,000 per day, per violation.
- 35. Unless otherwise specified, any communications with EPA regarding this Complaint and Compliance Order shall be in writing and directed to:

Chief, Region 10 RCRA Compliance Section, (HW-104) U.S. Environmental Protection Agency 1200 Sixth Avenue Seattle, Washington 98101

A copy of each document or other correspondence submitted to EPA pursuant to this Complaint and Compliance Order shall be sent to: Brett McKnight, DEQ, 811 S.W. Sixth Ave., Portland, OR 97204. EPA Project Coordinator, Sylvia Burges, shall be copied on all transmittals at the above address.

36. All actions required pursuant to this Order shall be undertaken in accordance with all applicable local, state, and federal laws and regulations.

THIS ____, day of _____, 1992.

MICHAEL F. GEARHEARD, Chief, Waste Management Branch, United States Environmental Protection Agency, Region 10